

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (original): A method for processing information, comprising:  
receiving a segmented judgment matrix, the segmented judgment matrix being a numerical matrix pairing each of a set of terms to each of a set of classifications, each term being a word or phrase, the segmented judgment matrix having a plurality of information submatrices, each element of each information submatrix representing a rating of a relevance of the term of the element to the classification of the element, each information submatrix being a numerical matrix representing the relevance of each of a subset of the set of terms to each of a subset of the set classifications; and  
using the segmented judgment matrix to calculate an information spectrum.
2. (original): The method of claim 1, wherein at least some of the elements of the information submatrices represent ratings of relevance made by a human being.
3. (original): The method of claim 1 wherein the segmented judgment matrix has rows and columns and each column of the segmented judgment matrix represents a classification and each row of the segmented judgment matrix represents a term.
4. (currently amended): A method for processing information, The method of claim 1,  
further comprising:  
receiving a segmented judgment matrix, the segmented judgment matrix being a  
numerical matrix pairing each of a set of terms to each of a set of classifications, each  
term being a word or phrase, the segmented judgment matrix having a plurality of  
information submatrices, each element of each information submatrix representing a  
rating of a relevance of the term of the element to the classification of the element, each

information submatrix being a numerical matrix representing the relevance of each of a subset of the set of terms to each of a subset of the set classifications;

using the segmented judgment matrix to calculate an information spectrum;

receiving a search request;

using the segmented judgment matrix to calculate an information spectrum of the search request;

using the segmented judgment matrix to calculate an information spectrum for each of a plurality of documents; and

identifying at least some documents of the plurality of documents as relevant to the search request based upon a comparison of the calculated information spectrums.

5. (original): The method of claim 4 wherein: each information submatrix has a plurality of classifications and a plurality of terms relevant to each classification; and using the segmented judgment matrix to calculate an information spectrum for each of a plurality of documents comprises calculating an information spectrum for each of the plurality of documents based upon at least some of the plurality of terms; the method further comprising: selecting the plurality of terms based upon a relevance of each term of the plurality of terms to at least some of the classifications of the information submatrices.
6. (original): The method of claim 4 wherein the step of calculating an information spectrum for each document and for the search request further comprises determining a log average among the ratings of relevance of the terms for each classification.
7. (original): The method of claim 4 wherein the step of identifying at least some documents further comprises determining a distance between the information spectrum of the at least some documents and the information spectrum of the search request.
8. (original): The method of claim 4 further comprising: selecting a document of the identified documents as definitely relevant to the search request including calculating an information spectrum of the selected document; and using the calculated information spectrum of the selected document as a new search request.

9. (original): The method of claim 4 further comprising:  
zooming in on a portion of a document information spectrum; and  
determining that a document and request have a wide spectrum with significant content in a field F of a term and measuring the request and document using a subengine for field F.
10. (original): A computer program product comprising instructions operable to cause data processing apparatus to:  
receive a segmented judgment matrix, the segmented judgment matrix being a numerical matrix pairing each of a set of terms to each of a set of classifications, each term being a word or phrase, the segmented judgment matrix having a plurality of information submatrices, each element of each information submatrix representing a rating of a relevance of the term of the element to the classification of the element, each information submatrix being a numerical matrix representing the relevance of each of a subset of the set of terms to each of a subset of the set classifications; and  
use the segmented judgment matrix to calculate an information spectrum.
11. (original): The product of claim 10 wherein at least some of the elements of the information submatrices represent ratings of relevance made by a human being.
12. (original): The product of claim 10 wherein the segmented judgment matrix has rows and columns and each column of the segmented judgment matrix represents a classification and each row of the segmented judgment matrix represents a term.
13. (currently amended): A computer program product comprising instructions operable to cause data processing apparatus ~~The product of claim 10 further comprising instructions~~ to:  
receive a segmented judgment matrix, the segmented judgment matrix being a numerical matrix pairing each of a set of terms to each of a set of classifications, each term being a word or phrase, the segmented judgment matrix having a plurality of information submatrices, each element of each information submatrix representing a rating of a relevance of the term of the element to the classification of the element, each information

submatrix being a numerical matrix representing the relevance of each of a subset of the set of terms to each of a subset of the set classifications;  
use the segmented judgment matrix to calculate an information spectrum;  
receive a search request;  
use the segmented judgment matrix to calculate an information spectrum of the search request;  
use the segmented judgment matrix to calculate an information spectrum for each of a plurality of documents; and  
identify at least some documents of the plurality of documents as relevant to the search request based upon a comparison of the calculated information spectrums.

14. (original): The product of claim 13 wherein: each information submatrix has a plurality of classifications and a plurality of terms relevant to each classification; and the instructions to use the segmented judgment matrix to calculate an information spectrum for each of a plurality of documents comprise instructions to calculate an information spectrum for each of the plurality of documents based upon at least some of the plurality of terms;  
the product further comprising instructions to:  
select the plurality of terms based upon a relevance of each term of the plurality of terms to at least some of the classifications of the information submatrices.
15. (original): The product of claim 13 wherein the instructions to calculate an information spectrum for each document and for the search request further comprise instructions to determine a log average among the ratings of relevance of the terms for each classification.
16. (original): The product of claim 13 wherein the instructions to identify at least some documents further comprise instructions to determine a distance between the information spectrum of the at least some documents and the information spectrum of the search request.

17. (original): The product of claim 13 further comprising instructions to:  
select a document of the identified documents as definitely relevant to the search request  
including instructions to calculate an information spectrum of the selected document; and  
use the calculated information spectrum of the selected document as a new search  
request.
18. (original): The method of claim 13 further comprising instructions to:  
zoom in on a portion of a document information spectrum; and  
determine that a document and request have a wide spectrum with significant content in a  
field F of a term and measure the request and document using a subengine for field F.
19. (withdrawn): A computer program product for processing text information, the product  
comprising instructions operable to cause data processing apparatus to perform the  
operations of:  
receiving a judgment matrix that is segmented into a plurality of information submatrices  
where each submatrix has a plurality of classifications and a plurality of terms relevant to  
each classification;  
evaluating a relevance of each term of the plurality of terms with respect to each  
classification of each information submatrix of the information submatrices;  
calculating an information spectrum for each of a plurality of documents based upon at  
least some of the plurality of terms; receiving a search request;  
calculating an information spectrum of the search request based upon at least some of the  
plurality of terms; and  
identifying at least some documents of the plurality of documents as relevant to the  
request based upon a comparison of the calculated information spectrums.